

PRECOMPUTED ACCOUNTS AND THE RULE OF 78S

A "precomputed" account is one which the account balance includes the finance charge and each month the full payment is subtracted from the balance. If the account pays off before maturity, a rebate of the unearned finance charge is given based on a method called "the Rule of 78s."

The Rule of 78s is commonly, even widely, used but is understood by very few people. It is a method of refunding finance charges and/or credit insurance premiums on consumer credit precomputed transactions when the borrower prepays the account in full. It is not the only refunding method that is available under the law.

The Rule of 78s is also known as the sum of the digits. In fact, the 78 is a sum of the digits of the months in a year: 1 plus 2 plus 3 plus 4, etc., to 12, equals 78. Under the rule, each month in the contract is assigned a value which is exactly the reverse of its occurrence in the contract. Hence, the 1st month of a 12 month contract gets the value of 12, the second month 11, etc., until the 12th month gets a value of 1. As the months elapse, the interest is earned by the lender equal to the total value of the expired months.

For example, prepaying after 2 months would result in the lender being able to keep 29.48% of the finance charges (1st month 12 plus 2nd month 11 = 23/78 or 29.48%). In another example, if the borrower prepays after 6 months, the lender would have earned 57/78s or 73.08% of the finance charges.

This is not as unfair as it seems. Even with a simple interest refunding, the borrower would not get a 50 percent interest rebate for having prepaid after half the term for the simple reason that you have more money borrowed early in the contract than at the end. The Rule of 78s will cost more upon prepayment but not as disproportionately more as it might seem.

Of course, most consumer credit contracts are longer than 12 months now and the sum of the digits is not confined to a 12 month contract.

EXAMPLE OF A RULE OF 78s FORMULA

(U*(U+1))/(T*(T+1)) = decimal * F = Rebate

U = Unearned term periods - U = 9	\ = Divided by
T = Term periods - T = 12	* = Times
F = Finance Charge - F = \$100.00	

Rule of 78s refund

In this refund example, the term of the contract is 12 months and the account prepaid after 3 months, leaving 9 months of the term unearned, and the finance charge is \$100.00.

U = 9 9 * (9 + 1) \ (12 *(12 + 1)) =
T = 12 (9 * 10) \ (12 * 13) =
F = \$100.00 90 \ 156 = .5769 refund decimal

.5769 * \$100.00 = \$57.69 Refund

As you can see, after 3 months of a 12 month contract, 42.31% of the finance charge is earned.

SIMPLE INTEREST

Simple interest is calculated from payment date to payment date on the principal balance outstanding at the contracted rate. When a payment is received the interest due is subtracted from the payment and the remaining amount is applied to reduce the principal balance.

At prepayment the amount due is the principal balance plus the interest due since the last payment.

NOTE. . . If a contract is paid out to the full term, the type of loan, precomputed or simple interest, is of no consequence if payments are made on time in a simple interest account.

The Rule of 78s does not have any effect on the earnings of a contract which is paid at maturity. Only prepayment will have the effect of the Rule of 78s raising the cost of the credit. Under the law, an actuarial rebate (based on an amortization of interest) is given on precomputed accounts with a term over 61 months instead of by the Rule of 78s.

RULE 78s Vs SIMPLE INTEREST CHART

From the following chart, we can see the percentage difference of the cost of a loan between a simple interest unearned and the Rule of 78s refund.

In the example given, if the precomputed account pays at maturity, the total finance charge paid would be the \$1,462.36. If a simple interest account did not have payments made on time, the interest could be greater than the precomputed account since interest is computed from payment date to payment date.

Simple Interest Vs Rule of 78's					
\$5,000 Loan for 36 months @ 17.5%, Interest \$1,462.36					
Mo.	Simple Interest		Rule of 78's		Difference
	%	Unearned	%	Refund	Amount
1	95.01	\$1389.44	94.59	\$1383.25	6.19
2	90.13	1318.08	89.34	1306.47	11.61
3	85.36	1248.29	84.23	1231.75	16.54
4	80.70	1180.11	79.28	1159.36	20.75
5	76.15	1113.55	74.47	1089.02	24.53
6	71.71	1048.64	69.82	1021.02	27.62
7	67.38	985.40	65.32	955.21	30.19
8	63.18	923.85	60.96	891.45	32.40
9	59.08	864.02	56.76	830.04	33.98
10	55.11	805.94	52.70	770.66	35.28
11	51.26	749.63	48.80	713.63	36.33
12	47.53	695.12	45.05	658.79	36.43
13	43.93	642.43	41.44	606.00	36.04
14	40.45	591.59	37.99	555.55	36.00
15	37.11	542.62	34.68	507.15	35.47
16	33.89	495.56	31.53	461.08	34.48
17	30.80	450.43	28.53	417.21	33.22
18	27.85	407.26	25.68	375.53	31.73
19	25.03	366.08	22.97	335.90	30.18
20	22.36	326.92	20.42	298.61	28.31
21	19.82	289.80	18.023	263.52	26.28
22	17.42	254.76	15.77	230.61	24.15
23	15.17	221.83	13.66	199.76	22.07
24	13.06	191.03	11.71	171.24	19.79
25	11.11	162.40	9.91	144.92	17.48
26	9.30	135.97	8.26	120.79	15.18
27	7.64	111.77	6.76	98.86	12.91
28	6.14	89.84	5.41	79.11	10.73
29	4.80	70.21	4.20	61.42	8.79
30	3.62	52.91	3.15	46.06	6.85
31	2.60	37.97	2.25	32.90	5.07
32	1.74	25.43	1.50	21.94	3.49
33	1.05	15.33	.90	13.16	2.17
34	.53	7.70	.45	6.58	1.12
35	.18	2.58	.15	2.19	.39
36	-0-	-0-	-0-	-0-	-0-

Remember. . . .

- ✓ No refunding method makes any difference if the account is paid to maturity on schedule.

- ✓ Under all refunding methods, more interest is earned at the beginning of the contract than at the end because more money is owed during that period in the contract.
- ✓ The law requires that you be advised of the refunding method and, generally speaking, the simple interest method or actuarial method will be better for the consumer if there is going to be prepayment. Precomputed accounts with a term over 61 months must have the refund computed on an actuarial method.
- ✓ With a Rule of 78s contract, making payments early will not reduce the total interest owed; paying the entire loan early will save some interest.
- ✓ When deciding whether to prepay an account, consider the potential rebate of credit insurance as well as interest.

If you have any questions concerning finance charge and/or credit insurance refunds, call one of the numbers listed on the cover.

Our representatives are always available to answer your consumer credit questions.



The Indiana Department of Financial Institutions, Division of Consumer Credit has many other credit related brochures available, such as:

Answers to Credit Problems
 Applying for Credit
 At Home Shopping Rights
 Bankruptcy Facts
 Buried in Debt
 Car Financing Scams
 Charge Card Fraud
 Choosing A Credit Card
 Co-Signing
 Credit and Divorce
 Credit and Older Consumers
 Deep in Debt?
 Equal Credit Opportunity
 Fair Credit Reporting
 Fair Debt Collection
 Gold Cards
 Hang up on Fraud
 High Rate Mortgages
 Home Equity Credit Lines
 How to Avoid Bankruptcy
 Indiana Uniform Consumer Credit Code
 Look Before you Lease
 Mortgage Loans
 Repossession
 Reverse Mortgage Loans
 Rule of 78s – What is it?
 Scoring for Credit
 Shopping for Credit
 Using Credit Cards
 Variable Rate Credit
 What is a Budget?
 What is the DFI?

Call our toll-free number or write to the address on the cover for a copy of any of the brochures listed or for further consumer credit information.



Rule of 78s Vs Simple Interest



DEPARTMENT OF FINANCIAL INSTITUTIONS

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